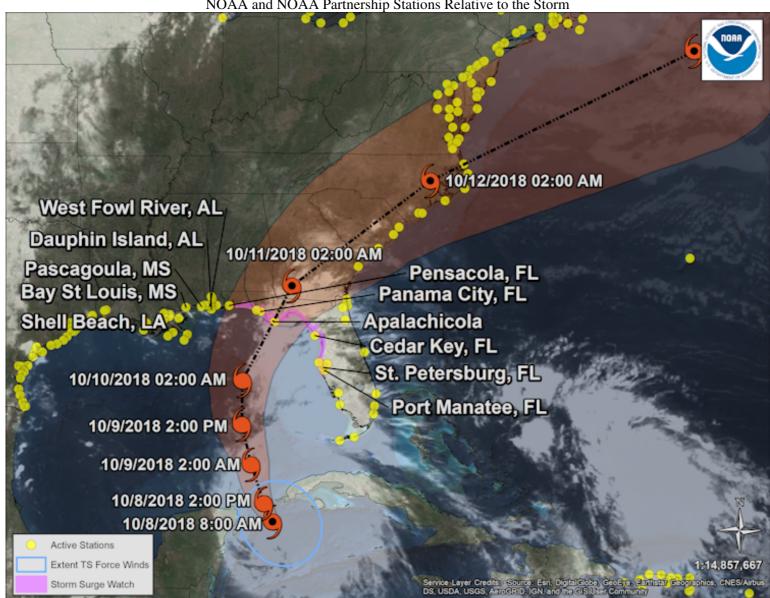




Hurricane Michael QuickLook Posted: 12:00 EDT 10/08/2018

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 10/06/2018 12:00 EDT, water levels along the norhteastern Gulf Coast from St Petersburg Florida to Alabama are slightly elevated and range between 0.7 to 1.8 ft above normal tide levels with the highest water levels at Appalachicola, FL. Tide stations to the west of the storm track in coastal Mississippi and Louisiana are also experiencing tidal levels between 1 and 1.8 ft above normal tide levels. Winds are steady between 10 and 20 knots, with gusts to 20 knots. Barometric pressure is gradually falling across the region.

Water Level and Meteorological plots available below are updated automatically. A line denoting <u>Mean Higher High Water</u> (MHHW) is displayed to provide an approximate indication of when flooding inundation may occur.

For additional real-time and historical inundation information for select stations affected by this storm, please visit <u>Coastal Inundation Dashboard</u>. For additional data, please see the <u>Center for Operational Oceanographic Products & Services</u> website.

For more information or archived products and reports, please visit the Storm QuickLook Homepage.

Analyst: LAH

Select National Hurricane Center Advisory Information:

BULLETIN

Hurricane Michael Advisory Number 8 NWS National Hurricane Center Miami FL 1100 AM EDT Mon Oct 08 2018

- ...MICHAEL BECOMES A HURRICANE AND CONTINUED STRENGTHENING EXPECTED...
- ...HEAVY RAINFALL AND STRONG WINDS SPREADING ACROSS WESTERN CUBA...
- ...RISK OF LIFE-THREATENING STORM SURGE...HEAVY RAINFALL...AND DANGEROUS WINDS INCREASING FOR THE NORTHEASTERN GULF COAST...

SUMMARY OF 1100 AM EDT...1500 UTC...INFORMATION

LOCATION...21.2N 84.9W
ABOUT 50 MI S OF THE WESTERN TIP OF CUBA
ABOUT 140 MI ENE OF COZUMEL MEXICO
MAXIMUM SUSTAINED WINDS...75 MPH
PRESENT MOVEMENT...N OR 10 DEGREES AT 7 MPH
MINIMUM CENTRAL PRESSURE...982 MB...29.00 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Hurricane Warning is in effect for...

* The Cuban province of Pinar del Rio

A Tropical Storm Warning is in effect for...

- * The Cuban province of the Isle of Youth
- * The coast of Mexico from Tulum to Cabo Catoche, including Cozumel

A Storm Surge Watch is in effect for...

* Navarre Florida to Anna Maria Island Florida, including Tampa Bay

A Hurricane Watch is in effect for...

* Alabama-Florida border to Suwannee River Florida

A Tropical Storm Watch is in effect for...

- * Suwannee River to Anna Maria Island Florida, including Tampa Bay
- * Alabama-Florida border to the Mississippi-Alabama border

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning.

A Storm Surge Watch means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours.

For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov.

A Hurricane Watch means that hurricane conditions are possible within the watch area. A watch is typically issued 48 hours before the anticipated first occurrence of tropical-storm-force winds, conditions that make outside preparations difficult or dangerous.

A Tropical Storm Watch means that tropical storm conditions are possible within the watch area, generally within 48 hours.

Interests elsewhere across the southeastern United States should monitor the progress of Michael.

For storm information specific to your area in the United States, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office. For storm information specific to your area outside the United States, please monitor products issued by your national meteorological service.

DISCUSSION AND OUTLOOK

At 1100 AM EDT (1500 UTC), the center of Hurricane Michael was located near latitude 21.2 North, longitude 84.9 West. Michael is moving toward the north near 7 mph (11 km/h). A northward motion at a slightly faster forward speed is expected through Tuesday night, followed by a northeastward motion on Wednesday and Thursday. On the forecast track, the center of Michael will move northward near the western tip of Cuba this afternoon and into the southeastern Gulf of Mexico by tonight. Michael will move across the eastern Gulf of Mexico Tuesday and Tuesday night, and is expected to move inland over the Florida Panhandle or Florida Big Bend area on Wednesday, and then move northeastward across the southeastern United States Wednesday night and Thursday.

Data from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds have increased to near 75 mph with higher gusts. Steady to rapid strengthening is forecast during the next day or so, and Michael is forecast to become a major hurricane by Tuesday or Tuesday night.

Hurricane-force winds extend outward up to 30 miles (45 km) from the center and tropical-storm-force winds extend outward up to 175 miles.

The estimated minimum central pressure based on Air Force Reserve reconnaissance data is 982 mb (29.00 inches).

HAZARDS AFFECTING LAND

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water has the potential to reach the following heights above ground if peak surge occurs at the time of high tide...

Indian Pass to Crystal River...8-12 ft
Okaloosa/Walton County Line to Indian Pass...5-8 ft
Crystal River to Anclote River...4-6 ft
Anclote River to Anna Maria Island including Tampa Bay...2-4 ft
Navarre to Okaloosa/Walton County Line...2-4 ft

WIND: Hurricane conditions will spread across the far western part of the Cuban province of Pinar del Rio this afternoon and evening.

Tropical storm conditions are expected across the remainder of the warning areas in Cuba and the Yucatan Peninsula later today.

Hurricane conditions are possible within the hurricane watch area along the U.S. Gulf Coast by Wednesday, with tropical storm conditions possible by Tuesday night or early Wednesday. Tropical storm conditions are possible within the tropical storm watch area by Tuesday night or early Wednesday.

RAINFALL: Michael is expected to produce the following rainfall amounts through the weekend...

Florida Panhandle and Big Bend into the Carolinas...4 to 8 inches, with isolated maximum amounts of 12 inches. This rainfall could lead to life threatening flash floods.

Florida Peninsula, Florida Keys, portions of the Mid-Atlantic States, and the southern New England coast...2 to 4 inches with local amounts of 6 inches. This rainfall could lead to life-threatening flash floods.

SURF: Swells generated by Michael are affecting the south coast of Cuba and the east coast of the Yucatan Peninsula. Swells are expected to begin affecting the coast of the eastern and northern Gulf of Mexico during the next day or so. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next intermediate advisory at 200 PM EDT. Next complete advisory at 500 PM EDT.

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Forecaster Brown

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: Port Manatee - Water Level, Port Manatee - Barometric, St. Petersburg, Tampa Bay - Water Level, St. Petersburg, Tampa Bay - Winds, Old Port Tampa - Water Level, Old Port Tampa - Barometric, Cedar Key - Water Level, Cedar Key - Winds, Cedar Key - Barometric, Apalachicola - Water Level, Apalachicola - Winds,

Apalachicola - Barometric, Panama City - Water Level, Panama City - Winds, Panama City - Barometric, Pensacola - Water Level, Pensacola - Water Level, Panama City - Barometric, Dauphin Island - Water Level, Dauphin Island - Winds,

Dauphin Island - Barometric, West Fowl River Bridge - Water Level, Pascagoula NOAA Lab - Water Level, Bay Waveland Yacht Club - Water Level, Shell Beach - Water Level

NOAA/NOS/CO-OPS 8726384 Port Manatee, FL

Preliminary Water Level, relative to Mean Higher High Water(MHHW) 1.0 Height in Feet (MHHW) 0.5 0.0 -0.5-1.0 -1.5-2.0 10/07 10/08 10/09 10/07 10/08 10/09 00:00 12:00 00:00 12:00 00:00 12:00

Last Observed Sample: 10/08/2018 12:18 (EDT). Data relative to MHHW Observed: 0.68 ft. Predicted: 0.07 ft. Residual: 0.61 ft. Historical Maximum Water Level: Sep 2 2016, 2.34 ft. Next High Tide: 10/08/2018 13:33 (EDT), 0.24 ft.

(Obs-Pred) MHHW

Predicted Tide

Observed WL

NOAA/NOS/CO-OPS 8726384 Port Manatee, FL

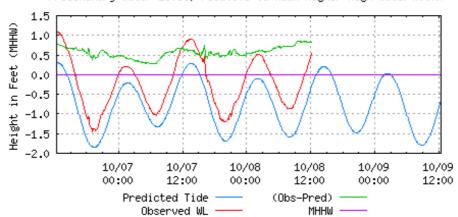
Barometric Pressure 1020 1019 Pressure (mb) 1018 1017 1016 1015 1014 10/08 10/08 10/07 10/07 10/09 10/09 00:00 12:00 00:00 12:00 00:00 12:00 barometric pressure

Last Observed Sample: 10/08/2018 12:18 (EDT)

Barometric Pressure: 1015.0 mb

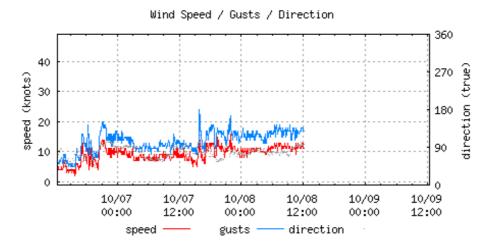
NOAA/NOS/CO-OPS 8726520 St. Petersburg, Tampa Bay, FL

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 12:12 (EDT). Data relative to MHHW Observed: 0.53 ft. Predicted: -0.29 ft. Residual: 0.82 ft. Historical Maximum Water Level: Aug 31 1985, 4.00 ft. Next High Tide: 10/08/2018 14:28 (EDT), 0.20 ft.

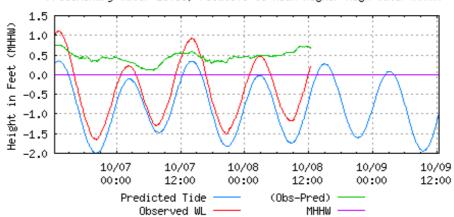
NOAA/NOS/CO-OPS 8726520 St. Petersburg, Tampa Bay, FL



Last Observed Sample: 10/08/2018 12:12 (EDT) Wind Speed: 11 knots Gusts: 17 knots Direction: 98° T

NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL

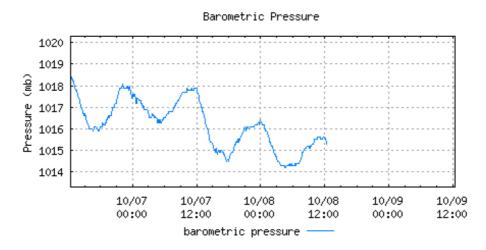
Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 12:24 (EDT). Data relative to MHHW Observed: 0.21 ft. Predicted: -0.47 ft. Residual: 0.68 ft. Historical Maximum Water Level: Oct 8 1996, 3.60 ft.

Next High Tide: 10/08/2018 15:00 (EDT), 0.27 ft.

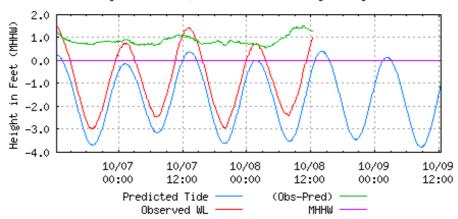
NOAA/NOS/CO-OPS 8726607 Old Port Tampa, FL



Last Observed Sample: 10/08/2018 12:24 (EDT)
Barometric Pressure: 1015.3 mb

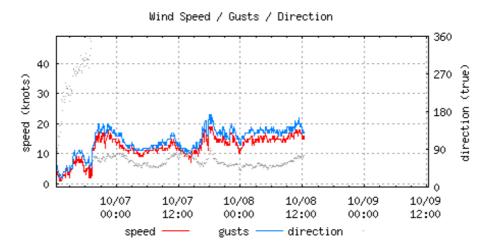
NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 12:24 (EDT). Data relative to MHHW Observed: 0.99 ft. Predicted: -0.28 ft. Residual: 1.27 ft. Historical Maximum Water Level: Sep 2 2016, 5.98 ft. Next High Tide: 10/08/2018 14:06 (EDT), 0.41 ft.

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL



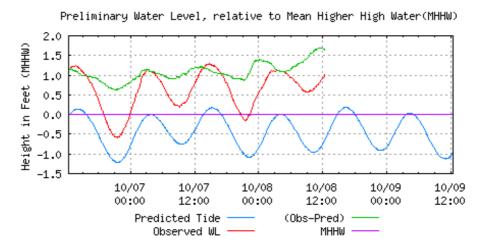
Last Observed Sample: 10/08/2018 12:24 (EDT) Wind Speed: 15 knots Gusts: 17 knots Direction: 75° T

NOAA/NOS/CO-OPS 8727520 Cedar Key, FL

Barometric Pressure 1020 1019 Pressure (mb) 1018 1017 1016 1015 1014 10/07 10/07 10/08 10/08 10/09 10/09 00:00 12:00 00:00 00:00 12:00 12:00 barometric pressure

Last Observed Sample: 10/08/2018 12:24 (EDT)
Barometric Pressure: 1015.7 mb

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL



Last Observed Sample: 10/08/2018 12:24 (EDT). Data relative to MHHW Observed: 1.01 ft. Predicted: -0.65 ft. Residual: 1.66 ft. Historical Maximum Water Level: Jul 10 2005, 6.43 ft. Next High Tide: 10/08/2018 16:20 (EDT), 0.18 ft.

NOAA/NOS/CO-OPS 8728690 Apalachicola, FL

Wind Speed / Gusts / Direction 360 40 270 direction (true) speed (knots) 30 180 20 90 10/09 10/07 10/07 10/08 10/08 10/09 00:00 12:00 00:00 12:00 00:00 12:00 gusts direction speed

> Last Observed Sample: 10/08/2018 12:24 (EDT) Wind Speed: 12 knots Gusts: 16 knots Direction: 108° T

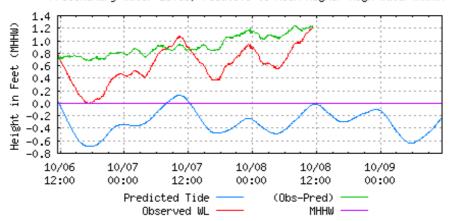
NOAA/NOS/CO-OPS 8728690 Apalachicola, FL

Barometric Pressure 1020 1019 Pressure (mb) 1018 1017 1016 1015 1014 10/07 10/07 10/08 10/08 10/09 10/09 00:00 12:00 00:00 12:00 00:00 12:00 barometric pressure

Last Observed Sample: 10/08/2018 12:24 (EDT)
Barometric Pressure: 1017.1 mb

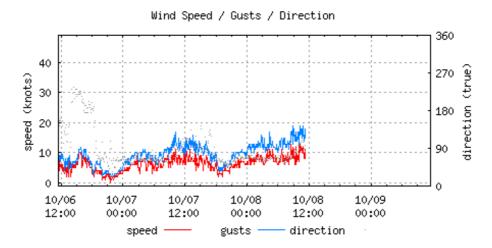
NOAA/NOS/CO-OPS 8729108 Panama City, FL

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 11:24 (CDT). Data relative to MHHW Observed: 1.22 ft. Predicted: -0.02 ft. Residual: 1.24 ft. Historical Maximum Water Level: Oct 4 1995, 5.72 ft. Next High Tide: 10/08/2018 11:42 (CDT), -0.02 ft.

NOAA/NOS/CO-OPS 8729108 Panama City, FL



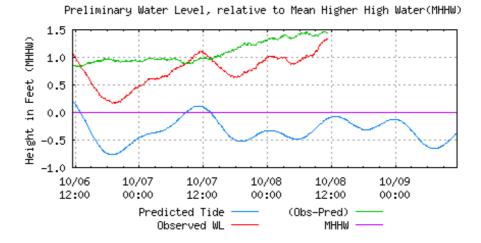
Last Observed Sample: 10/08/2018 11:24 (CDT) Wind Speed: 10 knots Gusts: 13 knots Direction: 101° T

NOAA/NOS/CO-OPS 8729108 Panama City, FL

Barometric Pressure 1020 1019 Pressure (mb) 1018 1017 1016 1015 1014 10/06 10/07 10/07 10/08 10/08 10/09 12:00 00:00 12:00 00:00 00:00 12:00 barometric pressure

Last Observed Sample: 10/08/2018 11:24 (CDT)
Barometric Pressure: 1017.3 mb

NOAA/NOS/CO-OPS 8729840 Pensacola, FL



Last Observed Sample: 10/08/2018 11:18 (CDT). Data relative to MHHW Observed: 1.35 ft. Predicted: -0.11 ft. Residual: 1.46 ft. Historical Maximum Water Level: Sep 16 2004, 9.54 ft. Next High Tide: 10/08/2018 12:43 (CDT), -0.07 ft.

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

40

30

20

10

0 **....** 10/06

12:00

10/07

00:00

speed

12:00

speed (knots)

Wind Speed / Gusts / Direction

270

180

180

90

180

10/08

12:00

direction

10/09

00:00

Last Observed Sample: 10/08/2018 11:18 (CDT) Wind Speed: 6 knots Gusts: 13 knots Direction: 99° T

00:00

gusts -

NOAA/NOS/CO-OPS 8729840 Pensacola, FL

Barometric Pressure 1020 1019 Pressure (mb) 1018 1017 1016 1015 1014 10/07 10/09 10/06 10/07 10/08 10/08 12:00 00:00 12:00 00:00 12:00 00:00 barometric pressure

Last Observed Sample: 10/08/2018 11:18 (CDT)

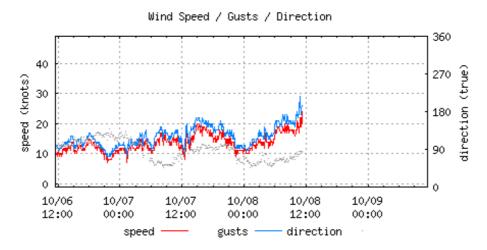
Barometric Pressure: 1016.6 mb

NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL

Preliminary Water Level, relative to Mean Higher High Water(MHHW) 2.0 Height in Feet (MHHW) 1.5 1.0 0.5 0.0 -0.5 -1.0 10/09 10/06 10/07 10/07 10/08 10/08 12:00 00:00 12:00 00:00 12:00 00:00 Predicted Tide (Obs-Pred) Observed WL MHHW

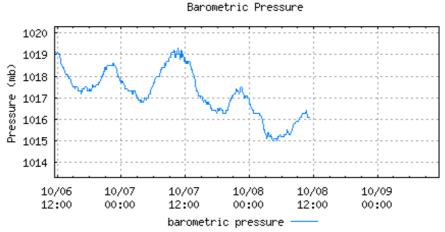
Last Observed Sample: 10/08/2018 11:18 (CDT). Data relative to MHHW Observed: 1.28 ft. Predicted: -0.13 ft. Residual: 1.41 ft. Historical Maximum Water Level: Sep 12 1979, 7.96 ft. Next High Tide: 10/08/2018 11:35 (CDT), -0.14 ft.

NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL



Last Observed Sample: 10/08/2018 11:18 (CDT) Wind Speed: 20 knots Gusts: 26 knots Direction: 83° T

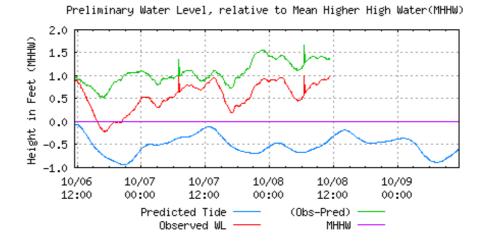
NOAA/NOS/CO-OPS 8735180 Dauphin Island, AL



Last Observed Sample: 10/08/2018 11:18 (CDT)

Barometric Pressure: 1016.1 mb

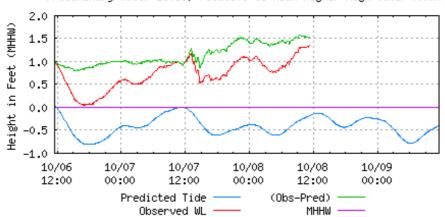
NOAA/NOS/CO-OPS 8738043 West Fowl River Bridge, AL



Last Observed Sample: 10/08/2018 11:18 (CDT). Data relative to MHHW Observed: 0.97 ft. Predicted: -0.39 ft. Residual: 1.36 ft. Historical Maximum Water Level: Oct 8 2017, 5.45 ft. Next High Tide: 10/08/2018 14:06 (CDT), -0.19 ft.

NOAA/NOS/CO-OPS 8741533 Pascagoula NOAA Lab, MS

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 11:18 (CDT). Data relative to MHHW Observed: 1.38 ft. Predicted: -0.18 ft. Residual: 1.56 ft. Historical Maximum Water Level: Oct 8 2017, 6.20 ft. Next High Tide: 10/08/2018 12:53 (CDT), -0.12 ft.

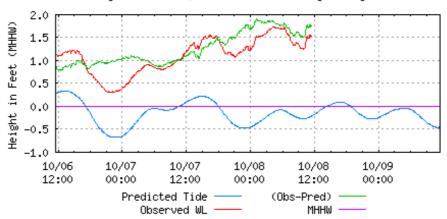
NOAA/NOS/CO-OPS 8747437 Bay Waveland Yacht Club, MS

Preliminary Water Level, relative to Mean Higher High Water(MHHW) 2.5 Height in Feet (MHHW) 2.0 1.5 1.0 0.5 0.0 -0.5 -1.0 10/09 10/06 10/07 10/07 10/08 10/08 12:00 00:00 00:00 00:00 12:00 12:00 Predicted Tide (Obs-Pred) MHHW Observed WL

Last Observed Sample: 10/08/2018 11:24 (CDT). Data relative to MHHW Observed: 1.66 ft. Predicted: -0.24 ft. Residual: 1.90 ft. Historical Maximum Water Level: Sep 1 2008, 9.10 ft. Next High Tide: 10/08/2018 14:35 (CDT), -0.12 ft.

NOAA/NOS/CO-OPS 8761305 Shell Beach, LA

Preliminary Water Level, relative to Mean Higher High Water(MHHW)



Last Observed Sample: 10/08/2018 11:24 (CDT). Data relative to MHHW Observed: 1.53 ft. Predicted: -0.22 ft. Residual: 1.75 ft. Historical Maximum Water Level: Aug 29 2012, 9.37 ft.

Next High Tide: 10/08/2018 16:49 (CDT), 0.09 ft.

Latest Water Level Observations on MHHW

Station ID	Station Name	Date/Time	Observed Water Level	Predicted Tide	Residual Water Level	24 Hour Maximum Storm Tide
8726384	Port Manatee, FL	10/08/2018 12:18 (EDT)	0.68 ft	0.07 ft	0.61 ft	0.83 ft
8726520	St. Petersburg, Tampa Bay, FL	10/08/2018 12:12 (EDT)	0.53 ft	-0.29 ft	0.82 ft	0.91 ft
8726607	Old Port Tampa, FL	10/08/2018 12:24 (EDT)	0.21 ft	-0.47 ft	0.68 ft	0.93 ft
8727520	Cedar Key, FL	10/08/2018 12:24 (EDT)	0.99 ft	-0.28 ft	1.27 ft	1.44 ft
8728690	Apalachicola, FL	10/08/2018 12:24 (EDT)	1.01 ft	-0.65 ft	1.66 ft	1.30 ft
8729108	Panama City, FL	10/08/2018 11:24 (CDT)	1.22 ft	-0.02 ft	1.24 ft	1.22 ft
8729840	Pensacola, FL	10/08/2018 11:18 (CDT)	1.35 ft	-0.11 ft	1.46 ft	1.35 ft
8735180	Dauphin Island, AL	10/08/2018 11:18 (CDT)	1.28 ft	-0.13 ft	1.41 ft	1.34 ft
8738043	West Fowl River Bridge, AL	10/08/2018 11:18 (CDT)	0.97 ft	-0.39 ft	1.36 ft	1.00 ft
8741533	Pascagoula NOAA Lab, MS	10/08/2018 11:18 (CDT)	1.38 ft	-0.18 ft	1.56 ft	1.38 ft
8747437	Bay Waveland Yacht Club, MS	10/08/2018 11:24 (CDT)	1.66 ft	-0.24 ft	1.90 ft	1.66 ft
8761305	Shell Beach, LA	10/08/2018 11:24 (CDT)	1.53 ft	-0.22 ft	1.75 ft	1.72 ft

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS) National Oceanic and Atmospheric Administration | U.S. Department of Commerce